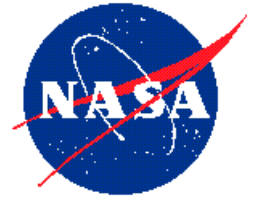


Spacecraft Supercomputer Prototype

Omitron, Inc.
Greenbelt, MD



INNOVATION

Transputer based multi-node
Parallel Processing Computer Board

ACCOMPLISHMENTS

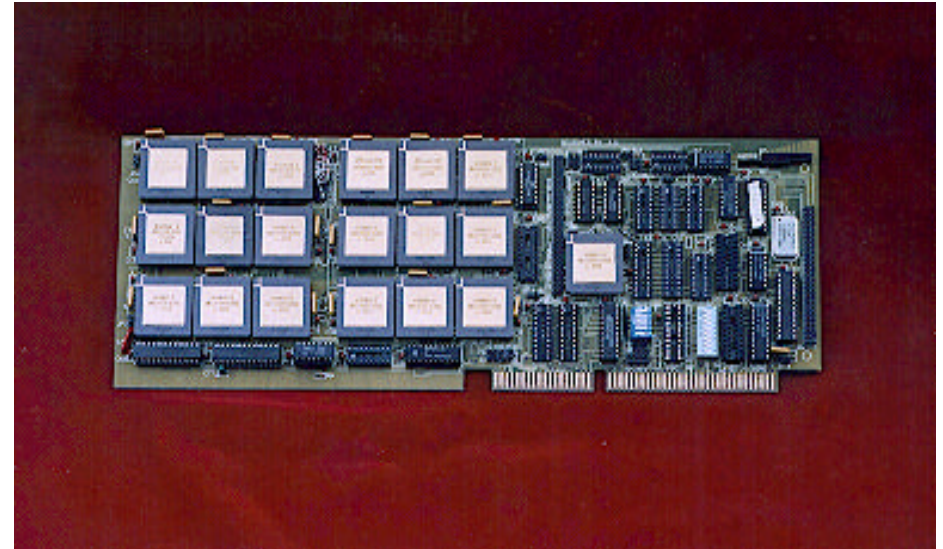
- ◆ Developed an architecture which exceeds the computational speeds of commercial units using similar topologies.
- ◆ Developed the system to be spacecraft migrateable.
- ◆ Delivered a prototype to the Goddard Space Flight Center.

COMMERCIALIZATION

- ◆ Received contract from NASA Langley Research Center to develop a similar parallel processing board for use in modeling fault tolerant computing systems for spacecraft.

PRODUCT(S) DEVELOPED

- ◆ Multi-mode Transputer based parallel processing system with 8 megs of RAM per node.
 - board has an open link architecture which enables it to be linked with an infinite number of additional boards for increased computing power
 - board is fully software configurable



***Transputer Based Multi-Node Parallel Processing
Computer Board***

GOVERNMENT/SCIENCE APPLICATIONS

- ◆ Spacecraft Image Processing
- ◆ Stress analysis, heat transfer, fluid dynamics, and plasma physics
- ◆ Simulation of complex physical systems, such as spacecraft, or electronic circuits
- ◆ Graphics in which the location of vectors on a CRT are computed for different views or scale

Goddard Space Flight Center

1990 Phase II, SS5-002 12/21/95

Points of Contact:

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